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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,243	10/25/2004	Kiyotaka Uchimoto	4035-0169PUS1	8938
2292 7590 01/28/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER LUDWIG, MATTHEW J				
ART UNIT 2178		PAPER NUMBER		
NOTIFICATION DATE 01/28/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

## Application No.

10/500,243

## Applicant(s)

UCHIMOTO ET AL.

## Examiner

MATTHEW J. LUDWIG

## Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 4-7 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7 and 10-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 11/3/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is in response to the request for reconsideration received 10/14/2008.
2. Claims 1, 4-7, and 10-15, are pending in the application. Claims 1 and 7 are independent claims.
3. Claims 1, 4-7, and 10-15, remain rejected under 35 U.S.C. 103(a) as being unpatentable over Micher in view of Onishi pursuant to applicant's arguments.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 4-7, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Micher et al., USPN 7,177,797 filed (8/31/2000) in view of Onishi et al., USPN 6,154,720 filed (6/13/1996).**

**In reference to independent claim 1, Micher teaches:**

If a selection of the displayed word choice is made, namely a word or word chunk, it is received by a processor which determines whether or not a selected word choice is one with a predetermined identifier (compare to ***“an input step for inputting at least a word as a keyword through input means”***). See page 7, lines 45-67.

In response to receiving selection of the displayed word chunk, the system utilizes the word chunk in place of the input character for word prediction and is thus sent to the word prediction software for selection of word chunks (compare to “*extracting step for extracting at least one sentence or sentence fragment including one or more keywords from a database*”). See column 7, lines 45-67 and column 8, lines 1-67. The reference to Micher discloses a method what utilizes word chunks to enhance word prediction. At least one of selectable words and word chunks are displayed in response to receipt of an input character. Thereafter, a selection of a displayed word or word chunk is received, and in response to receiving selection of a displayed word chunk, selectable words including the selected word chunk are displayed. The reference fails to explicitly state a means of extracting sentences or sentence fragments for generating an optimum sentence. However, the reference to Onishi provides a means of entering a sentence which then automatically selects an optimal conversational sentence example and displays the sentence. See column 19, lines 1-67 and column 20, lines 1-31. It would have been obvious to one of ordinary skill in the art, having the teachings of Micher and Onishi before them at the time the invention was made, to modify the word chunk methods of Micher to include the known optimal sentence retrieval methods of Onishi because it would have given the user a means of freely entering and retrieving both word chunks, sentences, and sentence fragments to improve a user's understanding of languages.

If the words including the selected word chunk include other words including an additional identifier identifying a next word chunk, the system will display these new word chunks up to what essentially is a second predetermined identifier (compare to “*text generation*”).

*step for generating an optimum sentence based on the extracted text by text generation means*”). See column 8, lines 20-67.

The morphing functions are used to generate all possible morphs or inflection forms of the displayed and selected word. Stored morphing data, stored along with various ones of the words in a database is used to determine which morphing functions will be used (compare to “parser means morphologically analyzes and parses the extracted text to obtain a dependency structure of the text by determining the probability of dependency of the entire text”). See column 8, lines 40-67. Furthermore, Micher discloses morphing categories based upon nouns, verbs, adjectives, etc. The morphing codes provide a proficient example of a dependency structure as presently claimed. The statistical technique would have been the methods for determining morphing codes and applying said techniques to analyze and words stored in a database and presented to a user. See column 11, lines 1-67 and column 12, lines 1-67.

**In reference to dependent claim 4**, Micher teaches:

If it is determined not to generate the first person singular form of the verb, the system proceeds where it is determined whether or not to generate the second person singular form of the verb based upon input data. If so, it is determined whether or not an irregular form of the verb is provided based upon information stored in the database. See column 17, lines 3-67.

**In reference to dependent claim 5**, Micher teaches:

The system utilizes the ‘imfs’, to derive the different morphs of various nouns, verbs, and adjectives accessed by a symbol sequence. This is done by making some icons dependent icons which, when completing an icon sequence, allow for the morphing or creation of a morphed form of the main word. See page 19, lines 1-56.

**In reference to dependent claim 6, Micher teaches:**

A text characteristic pattern utilized through codes. The codes listed (column 12, lines 1-45) illustrate a characteristic text pattern for many different types of words. See column 12, lines 1-45.

**In reference to dependent claim 13, Micher teaches:**

Morphing categories based upon nouns, verbs, adjectives, etc. The morphing codes provide a proficient example of a dependency structure as presently claimed. The statistical technique would have been the methods for determining morphing codes and applying said techniques to analyze and words stored in a database and presented to a user. See column 11, lines 1-67 and column 12, lines 1-67.

**In reference to dependent claim 14, Micher teaches:**

Morphing categories based upon nouns, verbs, adjectives, etc. The morphing codes provide a proficient example of a dependency structure as presently claimed. The statistical technique would have been the methods for determining morphing codes and applying said techniques to analyze and words stored in a database and presented to a user. See column 11, lines 1-67 and column 12, lines 1-67.

**In reference to claims 7, 10, 11, 12, and 15,** the claims recite similar language found in the rejected claims, numbered 1, 4, 5, 6, and 14. Therefore, the claims are rejected under similar rationale.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 4-7, 10-15 have been considered but are not persuasive.

Applicant argues on pages 6 and 7 that the references to Micher and Onishi fail to teach or suggest the limitations found within the independent claims 1 and 7. More specifically, applicant states that Micher simply teaches a linguistic retrieval system to predict a word and fails to teach extracting at least one sentence or sentence fragment including at least the keyword from a database. Furthermore, applicant states the reference to Micher cannot generate an optimum sentence based on the non-existing extracted sentence or sentence fragment. However, as presently claimed, both independent claims 1 and 7 present language in the alternative form. The limitations refer to 'sentence or sentence fragment'. A sentence fragment, as presently claimed, is broadly interpreted by the examiner as being a word, as taught by the reference to Micher. The system utilizes the word chunk in place of the input character for word prediction and is thus sent to the word prediction software for selection of word chunks. The reference to Micher discloses a method that utilizes word chunks to enhance word prediction. At least one of selectable words and word chunks are displayed in response to receipt of an input character. Thereafter, a selection of a displayed word or word chunk is received, and in response to receiving selection of a displayed word chunk, selectable words ***including the selected word chunk*** are displayed. The last limitation of the claim is the only limitation that states generating a sentence. However, without any further language providing an explanation as to how one would go from a sentence fragment to a sentence without adding words, the reference to Onishi was added to provide a means of entering a sentence which then automatically selects an optima

conversational sentence example and displays the sentence. It was possible at the time the invention was made, to one of ordinary skill in the art, for a developer to extract sentences based upon sentence fragments entered by a user.

Applicant argues on page 8 of the amendment that both Micher and Onishi fail to teach or suggest performing morphological analysis and parsing of the conversational sentence examples registered in the bilingual database to obtain a dependency structure of the conversational sentence examples by determining the probability of dependency of the conversational sentence examples by applying a statistical technique using a dependency model. However, the language being argued is not specifically stated within the language of independent claims 1 and 7. The morphing functions are used to generate all possible morphs or inflection forms of the displayed and selected word. Stored morphing data, stored along with various ones of the words in a database is used to determine which morphing functions will be used. Furthermore, Micher discloses morphing categories based upon nouns, verbs, adjectives, etc. The morphing codes provide a proficient example of a dependency structure as presently claimed. The statistical technique, as presently claimed, would have been the methods for determining morphing codes and applying said techniques to analyze words stored in a database and presented to a user.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO



MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Stephen S. Hong/  
Supervisory Patent Examiner, Art Unit 2178